

ATTACHMENT A

Remarks

The interview held with Examiner Astorino on January 12, 2005, is gratefully acknowledged. The courtesy and cooperative spirit shown by the Examiner during the interview is very much appreciated. The interview centered around the rejections on prior art and, in particular, around the use of the word "operable" in claim 1 and a proposed amendment wherein "operable" is no longer used. The interview also included a discussion of the newly cited Martinez reference used in the rejection of some of the claims. The substance of the discussion at the interview is incorporated in the remarks which follow.

Turning to the Office Action, and the claim for priority, it is noted that it is not necessary for applicant to file a certified copy of "the Australia PP 9022 application as required." Because this is a PCT application, applicant merely has to submit the Notification with respect to the transmittal of the priority document. This Notification is submitted herewith and hence it is respectfully submitted that the claim for foreign priority has now been perfected.

Claims 1, 2, 3 4, 5, 6, 7, 8, 9, 10, 11 and 22 have been rejected under 35 USC 102(e) as being "anticipated by" the Dempsey et al reference ("Dempsey"). This rejection is respectfully traversed.

As discussed during the interview, the Dempsey patent does not disclose a key feature of the present invention as claimed in claim 1, i.e., varying the frequency or phase of the reference signal so that the reference signal is a spread spectrum reference signal. In the Office Action the Examiner had taken the position that the base signal is operable to vary the frequency or phase of the reference signal so that the reference signal is a spread spectrum signal "because the base station is inherently capable of performing the recited function." This issue was also discussed in Section 9 of the Office Action wherein the phrase in question was considered to be a "recitation of the intended use of the claimed invention" and it was contended that if "the prior art structure

is capable of performing the intended use, then it meets the claim.” While applicant strongly disagrees with the contention that the previous recitation constituted a statement of intended use, it is respectfully submitted that the amendment made to claim 1 wherein the base station is recited as including “means for varying the frequency or phase of the reference signal so that said reference signal is a spread spectrum reference signal” overcomes this rejection. Thus, while applicant does not agree that the Dempsey base station is “inherently capable of performing the stated function” (the Dempsey based station could not perform this function unless specifically equipped to do so), it is understood that this contention was made based on the previous use of the term “operable” in claim 1 and thus, with the change made to claim 1, claim 1 is clearly patentable over Dempsey. Tentative agreement was reached at the interview that claim 1 would be patentable if so amended.

A second matter that came up during the interview concerns the language “so that one or more conditions of said subject can be monitored at said base station.” The Examiner suggested/required that a more positive recitation of this feature be provided. Claim 1 has also been amended to comply with this request/requirement and, in particular, now positively recites that “at least one condition of said subject is available to be monitored at said base station.”

Claims 13, 14, 15, 16, 18, 19 and 21 have been rejected under 35 USC 103(a) as being unpatentable over Dempsey in view of a newly cited Martinez reference. This rejection is respectfully traversed.

As discussed during the interview, the Martinez patent relates to radio frequency identification (RFID) interrogators and transponders and, at the lines to which the Examiner refers, states that the RFID transponders can “operate independently of the frequency of the energizing field [because of the use of “backscatter modulation”] and as a result, the interrogator may operate at multiple frequencies so as to avoid radio frequency (RF) interference, such as utilizing frequency hopping spread spectrum modulation techniques.” As stated in

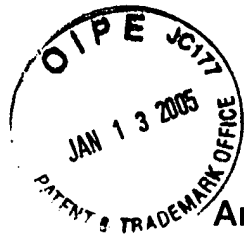
the patent, RFID transponders, i.e., RFID tags, are used to "track data relating to an object to which the RFID transponder is affixed," and, for example, are commonly used in connection with tracking railway cars. It is respectfully submitted that the Martinez patent is non-analogous art, and given the very general nature of the relevant teachings thereof as quoted above, it is respectfully submitted that the rejection based on the combination of the Dempsey and Martinez references is clearly the improper product of hindsight. Hence, it is respectfully submitted that claim 13 and the claims dependent thereon should be allowable along with claim 1.

With respect to the other rejections, the rejected claims are dependent claims which are patentable for at least the reasons set forth above in support of the patentability of the claims parent thereto. Moreover, a number of these claims are also separately patentable for the reasons set forth in the last response. However, given the patentability of parent claims 1 and 13, it is not believed necessary to further discuss here the patentability of the dependent claims.

Applicant has made an earnest attempt to place this application in condition for allowance based on the discussions with the Examiner, but as discussed during the interview, if the Examiner believes that problems still remain, he is respectfully urged to telephone the undersigned so that these problems can be dealt with.

Allowance of the application in its present form is respectfully solicited.

END REMARKS



ATTACHMENT B Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) Apparatus for physiological monitoring of a remote subject including:

a base station having a transmission means for transmitting a reference signal;
and

at least one physiological monitoring probe connectable to said subject, said physiological monitoring probe or probes having:

receiver means for receiving said reference signal;

monitoring means for monitoring said subject and generating a condition signal containing information related to a condition or conditions of said subject;

intermediate signal means for generating an intermediate signal derived by combining said condition signal with a fixed or varying frequency sub-carrier signal before modulating said reference signal;

modulation means for modulating said reference signal with said intermediate signal to produce a modulated reference signal containing said information contained in said condition signal; and

passive retransmission means for passively retransmitting said modulated reference signal to said base station;

wherein said base station has means for receiving said modulated reference signal, and means for demodulating said modulated reference signal to obtain said information related to one or more conditions of said subject so that ~~one or more conditions~~ at least one condition of said subject ~~can be~~ is available to be monitored at said base station, and said base station ~~is operable to vary~~ includes means for varying the frequency or phase of the reference signal so that said reference signal is a spread spectrum reference signal.

2. (Original) Apparatus as claimed in claim 1, wherein said receiving means and passive retransmission means are a passive radio transponder.
3. (Previously Presented) Apparatus as claimed in claim 1, wherein said monitoring means includes a physical parameter transducer.
4. (Previously Presented) Apparatus as claimed in claim 1, wherein said monitoring means includes a biological electrode.
5. (Previously Presented) Apparatus as claimed in claim 1, wherein said intermediate signal means is operable to convert analog and/or digital signals from the monitoring means to an intermediate signal which is used to modulate a radio frequency signal received by a passive radio transponder, so that the transponder automatically retransmits a modulated signal which contains information relating to the condition of the subject.
6. (Previously Presented) Apparatus as claimed in claim 1, wherein said passive radio transponder uses a plurality of intermediate signals to modulate a radio frequency reference signal.
7. (Previously Presented) Apparatus as claimed in claim 1, wherein said base station includes analog and/or digital outputs for outputting data.
8. (Previously Presented) Apparatus as claimed in claim 1, wherein said base station is connectable to a computer network, and operable to receive input and output data via said computer network.
9. (Previously Presented) Apparatus as claimed in claim 1, including encryption means so that said apparatus can transmit and/or receive data in encrypted form.

10. (Previously Presented) Apparatus as claimed in claim 1, wherein said condition signal includes a synchronous or an asynchronous data signal.
11. (Previously Presented) Apparatus as claimed in claim 1, wherein said base station is operable to vary the frequency or phase of the reference signal by a continuously varying signal having an instantaneous value that determines the respective instantaneous frequency or phase.
12. (Previously Presented) Apparatus as claimed in claim 11 in which the continuously varying signal is derived from a Pseudo-Random Binary Sequence.
13. (Previously Presented) A method of physiological monitoring of a remote subject including:
- transmitting a reference signal from a base station to at least one remote physiological monitoring probe connected to a subject;
 - varying the frequency or phase of said reference signal so that said reference signal is a spread spectrum reference signal;
 - monitoring said subject and generating a condition signal containing information related to a condition or conditions of a said subject;
 - generating an intermediate signal derived by combining said condition signal with a fixed or varying frequency sub-carrier signal;
 - modulating said reference signal with said intermediate signal to produce a modulated reference signal containing said information contained in said condition signal;
 - passively retransmitting said modulated reference signal from said biological monitoring probe to said base station; and
 - demodulating said modulated reference signal to obtain said information related to the condition or conditions of said subject so that the condition or conditions of said subject can be monitored at said base station.

14. (Previously Presented) A method as claimed in claim 13, wherein said intermediate signal is one of a plurality of intermediate signals, and said fixed or varying frequency sub-carrier signal is one of a plurality of sub-carrier signals, each corresponding to a respective one of said plurality of intermediate signals.
15. (Previously Presented) A method as claimed in claim 13 further including converting analog and/or digital signals from a subject monitoring means to the intermediate signal which is then used to modulate a radio frequency signal received by a passive radio transponder, whereby the transponder automatically retransmits a modulated signal containing information relating to the condition of the subject.
16. (Previously Presented) A method as claimed in claim 13, including transmitting data from said base station over a computer network, and/or inputting data over a computer network.
17. (Previously Presented) A method as claimed in claim 13, including encrypting data to be output by said base station, and/or encrypting said modulated reference signal.
18. (Previously Presented) A method as claimed in claim 13, including transmitting said condition signal as a synchronous or an asynchronous data signal.
19. (Previously Presented) A method as claimed in claim 13, including varying the frequency or phase of the reference signal by a continuously varying signal having an instantaneous value that determines the respective instantaneous frequency or phase.
20. (Previously Presented) A method as claimed in claim 19 in which the continuously varying signal is derived from a Pseudo-Random Binary Sequence.
21. (Previously Presented) A method-as claimed in claim 13, wherein said method is used to monitor sleep apnoea.

22. (Previously Presented) Apparatus as claimed in claim 1, wherein said base stations is also operable to use a fixed frequency reference signal.